

I want to thank everyone for being here today in Salt Lake City for the launch of the Western Renewable Energy Zone project. The Department of Energy is pleased to partner with the Western Governors' Association in this effort to promote the development of renewable energy and the infrastructure needed to deliver these clean sources of energy to consumers. I also want to thank Governor Huntsman for hosting us and recognize the leadership he and Governor Freudenthal are providing for the development of clean and diversified energy in the West.

Electricity is the backbone of our economy, and foremost among our efforts should be a commitment to ensure that it is reliable and affordable.

I expect we will be increasingly challenged in the coming years. Although the rate of electricity demand growth in the U.S. has slowed over the past several decades, overall electricity demand is still growing. DOE's Energy Information Administration projects that total U.S. electricity demand will increase by almost 30 percent by 2030. So, we have our work cut out for us. We have to improve overall energy efficiency, reduce peak demand relative to non-peak, and still meet the remaining demand reliably, at reasonable cost, and with the lowest reasonable environmental impact.

The scope of the challenge is similarly daunting for our private sector partners.

Decision making surrounding the investment into clean generation capacity continues to be difficult. Each of the options on the generation menu, whether from renewable energy, clean coal with carbon capture and sequestration, nuclear, or natural gas face unique hurdles. In addition to the regulatory uncertainties; technological challenges, rising construction costs, concerns about fuel prices and availability, impact on grid operations, and in many cases, public opposition, are just some of the issues that utilities currently confront.

The Department of Energy understands the scope of the challenge before us, and we have underway several initiatives to ensure a cleaner, more secure energy future.

We are investing in the research and development of advanced clean energy technologies, including advanced technologies for wind and solar, clean coal with carbon capture sequestration, and the next generation of nuclear reactors.

For example, competitively selected, cost-shared R&D projects through DOE's Wind Energy Program have addressed barriers to operability and reliability. The investments made by the Department contributed to the wind sector's addition of nearly 30 percent of new nameplate electricity capacity in the U.S. in 2007.

Further, the Department is seeking to reduce development and implementation costs in the area of solar power through the continued support of R&D programs, mainly in partnership with industry and universities. The DOE announced Solar America Initiative will invest up to \$13.7 million over three years for 11 university-led projects that will focus on developing advanced solar photovoltaic technology manufacturing process and products that aims to make solar energy cost-competitive with conventional forms of electricity by 2015.

On the coal side, we must address and resolve the obstacles to timely and sufficient investments in clean coal with carbon capture and sequestration. Again, DOE is leading the way in this effort. As you may recall, Secretary Bodman recently announced a restructured approach to the FutureGen project that will focus more on the CCS technology at IGCC facilities expected to be operational in 2015.

Under this plan, DOE's investment would provide funding support only for the CCS component of the power plant – not the entire plant. This will mitigate cost and will allow commercial application of CCS technology to begin as soon as the plants are put into operation, between 2015 and 2016.

Carbon-free nuclear can also serve a key role to meet our growing electricity demand. The Department is working in a joint government/industry cost-shared effort through its Nuclear Power 2010 program is working to identify sites for new nuclear power plants, develop and bring to market advanced nuclear plant technologies, evaluate the business case for building new nuclear power plants, and demonstrate untested regulatory processes. Through this important work industry has planned 33 new reactors at 20 locations across the country.

Efforts are clearly underway to advance clean energy technologies to change the way we power our homes and businesses.

With all this new, exciting investment into clean generation there is a fact that must be addressed in order to make these new sources of energy viable. Not only are renewable sources of generation often located in remote areas, but much of the new power plants with advanced technologies that we will need to build will also likely be sited in locations that are distant from urban areas. In many of these areas, existing transmission capacity is either minimal or non-existent. For example, most new wind turbines will not be sited in populous areas, and will likely require this additional transmission capacity. Clean coal with CCS will presumably be sited near geologic formations suitable for CO₂ storage, and may not be near major existing transmission facilities.

This means that if you want to support clean energy, you have to support transmission expansion in appropriate areas.

In order to keep pace with the desired changes in the generation mix we must expand and modernize the existing transmission and distribution infrastructure. This brings me to my next point; Regional planning. The Department strongly supports a regional approach to addressing the challenges of electricity resource planning. In most parts of the country, wholesale electricity markets have become regional in scale.

Today's pattern of siting much generation distant from load – which can often be in another state – will continue for many years to come and, therefore, state-level planning needs to be followed with regional-scale planning and coordination. After sharpening their thinking about their future electricity objectives, strengths, and needs, states need to discuss with their neighbors some basic questions concerning the mix and locations of the region's generation resources. These questions include: what transmission facilities are required and where, how urban areas should strike an appropriate balance between local generation, energy efficiency programs, and imports via transmission, and the like. This nation will benefit when the states in a region work in a cooperative and coordinated fashion to bring that shared view to reality.

Of course, that's why we are here today. We are about to embark on a project to bolster the growth of renewable energy sources, increase regional electricity planning among the states, and work in an open stakeholder process to develop transmission plans for the delivery of these resources.

The potential for new renewables development in the West is staggering, and the work the states are doing today is helping demonstrate not just what is possible, but what is probable. Thus far, however, the scope of this work has been largely restricted to renewable energy potential within individual state boundaries.

As we all know, our Nation's existing energy infrastructure can not stop at the state border. The Western Renewable Energy Zones project is predicated on this understanding. This initiative facilitates the work being done at the state level at a scale that encompasses the whole Western Interconnect and creates a market for new generation capacity from wind, solar, geothermal, biomass and hydro technologies.

Through various policy resolutions and initiatives advanced by the Western Governors' Association, the Western Electricity Coordinating Council, the Committee on Regional Electricity Power Cooperation, and all the alphabet soup organizations here in the West, the ideas and principles of regional coordination and planning efforts are providing an effective planning process.

It is a process that includes generation, transmission and non-wires; and which seeks to identify energy infrastructure needs and the solutions. These forums have provided transparent, inclusive planning tools that are essential to modernizing the electric grid, particularly in a social environment that is often highly contentious.

It would have been easy for me to stand before you today and cite the statistics and data which demonstrate the current rate of expansion of renewable generation and the investment being made to make these sources of generation more affordable and ready for commercial development.

The numbers tell a strong story.

We know, however, that more work is required if we are to provide consumers with the amount of clean energy they demand without sacrificing reliability or rendering this electricity unaffordable.

As I mentioned before, we are facing new challenges in meeting electricity demand in the face of uncertainties. I am confident, however, that we can rise to the occasion through regional-level collaboration and advancement in new technologies to achieve success.

The Western Renewable Energy Zone project is one example demonstrating that government leaders, industry and stakeholders are prepared to work together regionally to ensure a clean, affordable and reliable supply of energy without sacrificing economic prosperity. The Department is prepared to work with you and support this effort every step of the way.